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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,427	04/23/2002	Bette L. Bergman Reuter	BUR920010192	4973

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EXAMINER	
BOWERS, BRANDON	
ART UNIT	**PAPER NUMBER**
2825	

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/063,427	BERGMAN REUTER ET AL.	
	Examiner	Art Unit	
	Brandon W Bowers	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *8-15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, and 16-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 April 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20020528*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Group 1, claims 1-7 and 16-20 in Paper No. 20040210 is acknowledged. Cancellation of non-elected claims 8-15 is requested in the applicants next communication.

Claim Objections

Claim 20 is objected to because of the following informalities: It appears that there is a cut and paste error in this claim. It is treated as a program storage device with the same limitations as described in claim 5. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Houge et al., US Patent No. 6,651,226.

In reference to claim 1, Houge teaches a method comprising the steps of scanning a pre-release or released device for shape configuration data for process

sensitive sites that cause productivity loss, coding the shape configuration data such that it is recognizable to a design checker, and using the design checker to identify target matches where such shape configuration data is present in the design (column 4, line 66-column 5, line 15).

In reference to claim 2, Houge teaches where the target matches are collected as shapes inserted into the design data (column 4, line 66-column 5, line 15).

In reference to claim 3, Houge teaches where the design checker has the capability to check for 3-D structures (column 4, line 66-column 5, line 15).

In reference to claim 4, Houge teaches converting into a format usable by characterization, and metrology systems (column 4, line 66-column 5, line 15).

In reference to claim 5, Houge teaches wherein the using of the design checker to produce target matches is deployed automatically for new designs (column 4, line 66-column 5, line 15).

In reference to claims 16-20, drawn to a program storage device with the same limitations as described above in claims 1-5, the same rejections apply.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houge et al., US Patent No. 6,651,226 in view of Malhotra, Patent Application Publication No. 20030061583.

In reference to claim 6, Houge teaches a method comprising the steps of scanning a pre-release or released device for shape configuration data for process sensitive sites that cause productivity loss, coding the shape configuration data such that it is recognizable to a design checker, and using the design checker to identify target matches where such shape configuration data is present in the design (column 4, line 66-column 5, line 15). Houge does not teach producing images of the locations where shape configuration data is found. Malhotra teaches producing images of locations where shape configuration data is found (Figure 10). Accordingly, it would have been obvious for one skilled in the art at the time of invention to incorporate the teachings of Malhotra for producing images of locations where shape configuration data is found with the teachings of Houge towards a method comprising the steps of scanning a pre-release or released device for shape configuration data for process sensitive sites that cause productivity loss, coding the shape configuration data such that it is recognizable to a design checker, and using the design checker to identify target matches where such shape configuration data is present in the design because displays allow the user to monitor, modify and control the DRC process being performed by the computer system (paragraph 0074).

In reference to claim 7, Malhotra teaches the step of transfer the images and locations to a website configured so that the target matches can be visualized in usable forms (paragraph 0075).

Claims 1-2, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al., US Patent No. 4,791,586, in view of DeCamp et al., US Patent No. 6,063,132 in view of McKay, US Patent No. 6,418,551.

In reference to claim 1, Maeda teaches a method of scanning a device for shape configuration data in process sensitive sites that cause productivity loss (Column 2, line 49 – 63). Maeda does not teach coding the shape configuration data such that it is recognizable to a design checker and using the design checker to identify target matches where such shape configuration data is present in the design. DeCamp teaches coding shape configuration data such that it is recognizable to a design checker (Figure 1). DeCamp does not teach scanning a device for shape configuration data in process sensitive sites that cause productivity loss and using the design checker to identify target matches where such shape configuration data is present in the design. McKay teaches using the design checker to identify target matches where such shape configuration data is present in the design (column 7, lines 6-25). McKay does not teach scanning a device for shape configuration data in process sensitive sites that cause productivity loss and coding shape configuration data such that it is recognizable to a design checker. One who is skilled in the art will recognize that these are the three steps necessary to build and use a Design Checker. The first step is to gather data of

shapes that are know to cause process errors. The second step is to build these shapes into a library/file that is suitable for use. The third is use the library/file to check an integrated circuit. Accordingly, it would have been obvious for one skilled in the art at the time of invention to incorporate the teachings of Maeda for scanning a device for shape configuration data in process sensitive sites that cause productivity loss with the teachings of DeCamp for coding shape configuration data such that it is recognizable to a design checker and the teachings of McKay for using the design checker to identify target matches where such shape configuration data is present in the design to make a method comprising the steps of scanning a device for shape configuration data for process sensitive sites that cause productivity loss, coding the shape configuration data such that it is recognizable to a design checker, and using the design checker to identify target matches where such shape configuration data is present in the design because accuracy in design rule checking is critical to the IC design process (McKay, Column 1, lines 19-56; Decamp, Column 1, line 18 – Column 2, line 10).

In reference to claim 2, Kay teaches where the target matches are collected as shapes inserted into the design data (column 7, lines 6-25).

In reference to claims 16-17, drawn to a program storage device with the same limitations as described above in claims 1-2, the same rejections apply.

Conclusion

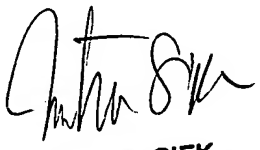
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon W Bowers whose telephone number is

(571)272-1888. The examiner can normally be reached on 8:30 am until 5:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571)272-1907. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

BWB



VUTHE SIEK
PRIMARY EXAMINER